

## Labiosa, Rochelle

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**From:** Labiosa, Rochelle  
**Sent:** Tuesday, February 23, 2016 9:56 AM  
**To:** Larson, Chad (ECY)  
**Subject:** RE: Question on nutrients and algae work in Washington

Hi Chad,

Thanks for meeting last week. I checked schedules, and it looks like the first available time to have an initial discussion with the HQ NSTEPS program is 3/16, from 11-noon PT. If that works for you, please let me know – and if you could send a few alternates that might work the week after 3/16 week, that would be great. Sometimes things come up and I need to reschedule.

All the best,  
Rochelle

Rochelle Labiosa, Ph.D.  
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US EPA, Region 10  
1200 Sixth Avenue, Suite 900, MC: OWW-191  
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**From:** Larson, Chad (ECY) [mailto:clar461@ECY.WA.GOV]  
**Sent:** Wednesday, February 17, 2016 3:02 PM  
**To:** Labiosa, Rochelle  
**Subject:** RE: Question on nutrients and algae work in Washington

Sure, I'll go ahead and give you a call at 1 PM.

Thanks so much!

Chad

Chad A. Larson, Ph.D.  
Stream Ecologist  
Environmental Assessment Program  
Washington State Department of Ecology  
300 Desmond Drive SE  
P.O. Box 47710  
Olympia, WA 98504-7710  
Phone: (360) 407-7456

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**From:** Labiosa, Rochelle [mailto:labiosa.rochelle@epa.gov]  
**Sent:** Wednesday, February 17, 2016 2:48 PM  
**To:** Larson, Chad (ECY) <clar461@ECY.WA.GOV>  
**Subject:** RE: Question on nutrients and algae work in Washington

That would work fine for me – 1 PM?

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**From:** Larson, Chad (ECY) [<mailto:clar461@ECY.WA.GOV>]  
**Sent:** Wednesday, February 17, 2016 2:46 PM  
**To:** Labiosa, Rochelle <[labiosa.rochelle@epa.gov](mailto:labiosa.rochelle@epa.gov)>  
**Subject:** RE: Question on nutrients and algae work in Washington

Hi Rochelle,

Thank you very much for making yourself available to talk about NSTEPS. Perhaps I could give you a call on Friday after 1 PM? Thanks again!

Regards,

Chad

Chad A. Larson, Ph.D.  
Stream Ecologist  
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Washington State Department of Ecology  
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**From:** Labiosa, Rochelle [<mailto:labiosa.rochelle@epa.gov>]  
**Sent:** Friday, February 12, 2016 4:42 PM  
**To:** Larson, Chad (ECY) <[clar461@ECY.WA.GOV](mailto:clar461@ECY.WA.GOV)>  
**Subject:** RE: Question on nutrients and algae work in Washington

Sounds good – happy to discuss with you. I think NSTEPS is a logical fit if there are funds available- sounds similar to a project that we just completed Phase I of for Oregon. I will be out of the office through Tuesday, back in on Wednesday. If you have some free time between Wed and Fri next week for a call, just let me know. I am pretty flexible Wednesday after 2 and Friday after 1 if there is a time in there that might work for you.

All the best,  
Rochelle

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**From:** Larson, Chad (ECY) [<mailto:clar461@ECY.WA.GOV>]  
**Sent:** Friday, February 12, 2016 4:22 PM  
**To:** Labiosa, Rochelle <[labiosa.rochelle@epa.gov](mailto:labiosa.rochelle@epa.gov)>  
**Cc:** Wu, Jennifer <[Wu.Jennifer@epa.gov](mailto:Wu.Jennifer@epa.gov)>  
**Subject:** RE: Question on nutrients and algae work in Washington

Hi Rochelle,

Thanks so much for getting back to me with information about NSTEPS. We have been expanding our sampling of periphyton communities in WA streams and are now sampling at all reference sites and our probabilistic sites. I have also been working with NAWQA and NRSA nutrient/periphyton data. However, it would be interesting to see if there is something we could do within the NSTEPS framework.

Whenever is convenient for you, I would definitely be interested in finding out a little more.

Thanks so much for your help!

Regards,

Chad

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**From:** Labiosa, Rochelle [<mailto:labiosa.rochelle@epa.gov>]  
**Sent:** Friday, February 12, 2016 10:25 AM  
**To:** Larson, Chad (ECY) <[clar461@ECY.WA.GOV](mailto:clar461@ECY.WA.GOV)>  
**Cc:** Wu, Jennifer <[Wu.Jennifer@epa.gov](mailto:Wu.Jennifer@epa.gov)>  
**Subject:** RE: Question on nutrients and algae work in Washington

Hi Chad,

Thanks for your interest in NSTEPS – below is a quick overview, but please let me know if you have any follow up questions:

There are rolling applications, and the template for applying for funds is relatively simple – a four page workplan with milestones/deliverables that I fill out in conversation with the state or tribe. Then we forward it to HQ and they see if they have the funds to support the work. The funding goes to Tetrattech via a contract and can support several related tasks to improve nutrient target development- refining monitoring programs/strategies, data analysis after samples are collected and analyzed, and model development in some cases. In ID and OR, the work has focused on cleaning up a database of paired periphyton and nutrient data, and conducting a variety of statistical and reference comparative approaches to identify relationships between TN and TP and response variables, including algal taxonomy (periphyton) in streams. ID will now be continuing some work on streams and starting some on lakes, and OR will be continuing work on streams.

Please let me know if NSTEPS sounds like it is of interest to you and we can talk more.

All the best,  
Rochelle

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**From:** Wu, Jennifer  
**Sent:** Friday, February 12, 2016 10:17 AM  
**To:** Labiosa, Rochelle <[labiosa.rochelle@epa.gov](mailto:labiosa.rochelle@epa.gov)>  
**Cc:** Larson, Chad (ECY) <[clar461@ECY.WA.GOV](mailto:clar461@ECY.WA.GOV)>  
**Subject:** RE: Question on nutrients and algae work in Washington

Sorry, feel free to forward to Chad directly. His email's above.

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**From:** Labiosa, Rochelle  
**Sent:** Friday, February 12, 2016 9:36 AM  
**To:** Wu, Jennifer <[Wu.Jennifer@epa.gov](mailto:Wu.Jennifer@epa.gov)>  
**Subject:** RE: Question on nutrients and algae work in Washington

And Jenny – let me know. I responded to your message, but let me know if you will forward my email or if I should contact Chad directly. Thanks, Rochelle

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**From:** Wu, Jennifer  
**Sent:** Thursday, February 11, 2016 3:10 PM  
**To:** Labiosa, Rochelle <[labiosa.rochelle@epa.gov](mailto:labiosa.rochelle@epa.gov)>  
**Subject:** FW: Question on nutrients and algae work in Washington

Hi Rochelle, do you have information on NSTEPS you could send out to Chad Larson at Ecology? Also, you might already know about this work, but Ecology was in town a couple of weeks ago, and talked about doing some algae typing work (so I thought) that I thought sounded interesting for work in the Deschutes and Powder/Burnt. I'm terribly behind on so many of my projects, so also, if there's anything interesting going on for NSTEPS, I'm interested! - Jenny

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**From:** Larson, Chad (ECY) [<mailto:clar461@ECY.WA.GOV>]  
**Sent:** Thursday, February 11, 2016 11:09 AM  
**To:** Wu, Jennifer <[Wu.Jennifer@epa.gov](mailto:Wu.Jennifer@epa.gov)>  
**Subject:** RE: Question on nutrients and algae work in Washington

Hi Jennifer,

Sorry for my slow response and thank you for the information about the Powder. Unfortunately, we do not yet have any reports available on the nutrient/algae work we are doing. We have been heavily involved with QA/QC of the all of the data that has been collected since 2009 for macroinvertebrates, periphyton, water chemistry and habitat and we have just completed most of that work. Now we can start examining/working with the data and will hopefully be producing some reports in the near future. The work we presented at the meeting you attended was for the Deschutes River, but I have been also doing similar analyses with periphyton for Soos Creek near Covington, WA and Squalicum Creek near Bellingham, WA. Let me know if you want to discuss any of those results. I am definitely interested in learning more about NSTEPS.

Best,

Chad

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**From:** Wu, Jennifer [<mailto:Wu.Jennifer@epa.gov>]  
**Sent:** Monday, February 08, 2016 11:48 AM  
**To:** Larson, Chad (ECY) <[clar461@ECY.WA.GOV](mailto:clar461@ECY.WA.GOV)>  
**Subject:** Question on nutrients and algae work in Washington

Hi Chad, it was really nice to meet you last week and hear about the sampling work that you're doing in Washington. I know you've already talked with Shannon Hubler in Oregon DEQ about the NSTEPS work in the Deschutes and Burnt-Powder Basins in central and eastern Oregon. I was wondering if you had any reports or information on the nutrients and algae typing work you had mentioned at the meeting. Unfortunately, I can't find my notes where I wrote the name of the stream, though I think it was by Bellingham.

For your information, the above includes the QAPP that was done by Tetrattech for field sampling work in the Powder.

Thanks!  
Jenny